オイコノミカ 第39巻 第1号, 2002年, pp. 81-92

# Comparative Analysis of Italian and French Firms' Involvement in Tunisian Manufacturing

Anis Khayati

## 1. Introduction

In light of the world economic integration, this paper seeks to examine the motives, the determinants and the major obstacles related to foreign direct investment in the Tunisian manufacturing sector. The empirical research is based upon the answers to a questionnaire completed in 2000 and 2001 by Italian and French firms operating in Tunisia. The choice of Italian and French firms is related to the fact that companies from these two countries are fairly representative of firms with foreign participation in Tunisian manufacturing (36% for France and 21% for Italy). Besides, the choice of these two types of firms would allow us to add the comparative aspect by finding out if the motives and determinants for FDI were similar or not for enterprises from Italy and France.

### 1.1 Framework

The available field work related to Tunisian FDI is so far lacking. In general terms, it is either of descriptive nature or related to localization macroeconomic variables. The present study examines additional economic reasons and determinants for FDI in Tunisia.

In effect, the eclectic paradigm of Dunning* is used as the main analytical framework to this study. The eclectic paradigm seeks to shed light on three important questions pertaining to the activities of French and Italian firms operating in Tunisia. In effect, it

* The eclectic paradigm of Dunning stands at the intersection between the macroeconomic theory of international trade and the microeconomic theory of the firm. It suggests that the structure of markets, transaction costs and the managerial strategy of firms are all important determinants of international economic activity. The firm is no longer a black box since firms differ in their organizational systems, innovatory abilities and in their appraisal of commercial benefits and risks.

seeks to provide a systematic and comprehensive framework for explaining : *Why* multinational enterprises (MNEs), with headquarters in France and Italy have some form of involvement in Tunisia ? *What* are the kinds of competitive advantages they possess over Tunisian firms ? And *how* do they find it economic to internalize the markets of these assets with complementary factor endowments in the Tunisian location ? It argues that the choice of whether an ownership advantage (O) is exploited by the firm possessing it, or shared with or leased to other firms, determines the form of involvement. Our study identifies several potential competitive advantages of Italian and French firms in their business activities. The location specific advantages (L) hypothesized by the eclectic paradigm are those which reflect the attractions offered by Tunisia as a site for MNE activity. The final set of advantages- the internalization advantages- (I) addresses the issue of the form or modality of overseas involvement. The paradigm suggests that internalization and ownership advantages of firms are closely interactive.

In the first stage of our field research, we identified some Italian and French firms that operate in the Cap Bon region in Tunisia. The choice of this location was related to practical reasons (easier contact). A six-page questionnaire was then presented to the persons in charge of the companies. Responses used in our study were received from 18 Italian firms and 14 French firms.

In completing the questionnaire, executives were asked to rank, on a sale of 1 to 5, their perceptions of the significance of a group of ownership, location, and internalization variables identified (5 representing the most important and 1 the least important). We choose 2.5 (highest number in the scale divided by 2) to be the mid-point of the scale even though 3 could be the real mid-point and the mean. This is to improve the distribution of answers (executive's bias). In addition to those listed in the questionnaire, executives were asked to identify the major impediments to FDI in Tunisia. The perceived ranking for each of the variables was then averaged and compared. As the following sections will describe, the tables reveal some interesting findings.

### 1.2 Methodology

The method we employ, to test whether an observed difference between two sample means can be attributed to a chance or not, is based on the following theory : If $m_1$ and $m_2$ are the means of two small independent random samples of size $n_1$ and $n_2$, the sampling distribution of the static $n_1 - n_2$ can be approximated closely with a normal curve having the mean $\mu_1 - \mu_2$ and the standard deviation $\sqrt{\frac{s_1{}^2}{n_1} + \frac{s_2{}^2}{n_2}}$.

Where $\mu_1$, $\mu_2$, $s_1$ and $s_2$ are the means and the standard deviations of the two populations from which the two samples came.

By independent samples, we mean that the selection of one sample is in no way affected by the selection of the other. In most practical situations $s_1$ and $s_2$ are unknown, but if we limit ourselves to small samples ($n_1 < 30$ or $n_2 < 30$), we can use the sample standard deviations $s_1$ and $s_2$ as estimates $\hat{s}_1$ and $\hat{s}_2$, and base the test of the null hypothesis $\mu_1 - \mu 2 = 0$ on the statistic:

$$t = \frac{m_1 - m_2}{\sqrt{\left(\frac{(n_1-1)s_1{}^2 + (n_2-1)s_2{}^2}{n_1+n_2-2}\right) \cdot \left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

; Whose sampling distribution is the t distribution with $n_1 + n_2 - 2$ degrees of freedom.

## 1.3 Contextual Variables

### 1.3.1 *Type of FDI*

41% of the questioned firms belonged to the on-shore sector, and 59% to the off-shore sector. Separately, 28% of Italian enterprises and 57% of French enterprises were in the on-shore sector (respectively against 72% and 43% in the off-shore sector). In the present study, we will not look at how this contextual variable may influence the motives and determinants of FDI in Tunisia.

### 1.3.2 *Size of the firm*

All chosen firms belonged to the category of small and medium enterprises (SMEs ; number of employees less than 100). In this study, we were not searching to study the impact of the relation between the size of the firm (small enterprises and medium enterprises) and the determinants of FDI.

### 1.3.3 *Industry Type*

Again, all surveyed firms were in the same industrial category, namely manufacturing. Because of the sample's size and the distribution of the studied enterprises among different manufacturing sub-sectors, it is difficult to know how this contextual variable could influence the eclectic paradigm.

### 1.3.4 *Country of Origin*

This is the contextual variable that we were seeking to study. *We were interested to find out if the motives and determinants for FDI were similar or not for enterprises from Italy and France.*

## 2. The Sample Firms : Characteristics

Analysis of companies benefiting from foreign partnerships shows that France remains the predominant partner with 36% in terms of number of companies with foreign participation (531 companies in 1999), and next comes Italy with 21% (302 companies in 1999). We were targeting to get responses from about 50 enterprises. But despite direct visits and successive mailings, the total survey participation remained relatively lower. Some of the questionnaires were not included in our analysis. We excluded those questionnaires that were less than satisfactory. Our final sample of analyzed firms contained 14 French firms and 18 Italian firms.

### 2.1 Industry of Firms

The main sectors of activities of the surveyed companies were textiles and clothing (34%), followed by the electrical sector (21%), Chemicals (15%), Agro-industries (12%), Mechanical (6%), and the remaining in construction and other industries. Separately, for French firms, 29% in textiles and clothing, 21% respectively in chemicals and mechanical, 15% in agro-industries, 7% in electrical and other industries ; For Italian firms, 38% in textiles and clothing, 33% in the electrical sector, 12% respectively in agro-industries and chemicals, and 5% in other industries.

### 2.2 Age of Firms

The surveyed firms have been involved in FDI in Tunisia for 7.1 years in average. Separately, the Italian firms have been involved for 5.7 years in average ; and the French firms a little bit longer, for about 8.5 years in average.

### 2.3 Size of Firms

The approximate size of original and current FDI in Tunisia was up to US $ 1 million for the overwhelming majority of the firms (only three firms, two Italian and one French, had an investment from 1 to 10 $ million). The average number of employees in French firms was 28 and in Italian firms 40.7.

### 2.4 Degree of Multinationality

Most surveyed firms did not clearly specify the number of countries in which they have FDI outside Tunisia. Therefore, we were not able to detect which group of firms is more global. However, for the approximate size of their Tunisian FDI as a percentage of their global investment, it remains expectantly low for most firms, but between the range of less than 1% and 30% for the French and less than 1% and 20% for the Italian.

## 3. The Motives for Investing

The types of foreign value-added activities undertaken by MNEs may be very differently motivated. Because of this, it is difficult to be exhaustive in reviewing all the motives behind the enterprises we surveyed. In the next sections, we will be looking at some financial and strategic motives behind the French and Italian firms operating in Tunisia.

### 3.1 Gains from Tunisian Investment

As far as the degree of profitability is concerned, the Italian and French firms combined perceive Tunisia as being above average (3.18) which does not necessarily make the profitability a strong motive for FDI in this country. The two groups of firms are not significantly different in terms of their profitability in Tunisia.

**Table 1** Profitability in Home and Host Countries

| | French | | Italian | | All | | t-Test Ho: $\mu1-\mu2=0$ |
|---|---|---|---|---|---|---|---|
| | m1 | s1 | m2 | s2 | m | s | |
| Tunisia | 3.35 | 0.49 | 3.05 | 0.61 | 3.18 | 0.53 | 1.62 |
| Home country | 4.42 | 0.85 | 4.11 | 0.9 | 4.24 | 0.92 | 0.99 |

Given the responses, we believe that the way profitability is measured reflected comparative figures. The French firms perceive their profitability in Tunisia to be above average (3.35), which conforms to the traditional colonial approach of their multinational activity ; and the Italian firms perceive themselves as less profitable (3.05). This conforms to their global multinational activity approach in North Africa where the foreign market is perceived as being an extension or part of their global market. It is also noteworthy that French and Italian companies perceive Tunisia as being less profitable than their home countries, which indicates that short-run profitability-at least- is not a strong motive for their Tunisian FDI. This result can be related to the difference in the size of the companies and of the market in host and home countries.

Table 2 Gains from Tunisian Investments

| | French | | Italian | | All | | t-Test Ho : $\mu 1-\mu 2=0$ |
|---|---|---|---|---|---|---|---|
| | m1 | s1 | m2 | s2 | m | s | |
| 1. Earnings before foreign taxes | 3.28 | 0.47 | 3.66 | 0.76 | 3.49 | 0.62 | −1.63 |
| 2. Earnings after taxes | 3.07 | 0.91 | 3.88 | 0.75 | 3.52 | 0.91 | −2.74 |
| 3. Other contributions (other than financial ; e. g. access to raw materials..) | 2.57 | 0.93 | 1.16 | 0.59 | 1.77 | 0.97 | 5.22 |

Looking at the degree of importance in decision-making in Italian and French enterprises, gains from Tunisian FDI are weighted differently. Italian firms are clearly concerned with their earnings before and after taxes (3.66 and 3.88), and they do not take into consideration other contributions of affiliate to parent company (1.16). French enterprises have a different approach. They are concerned with their earnings before taxes (3.28), and to a lesser extent after foreign and domestic taxes (3.07). French companies have been involved earlier and they know better how to take advantage of the system (taxation for instance). This is probably why French firms are above average in terms of "other contributions of affiliates to parent company". Italian enterprises are rigid when it comes to certain adjustments in business activities. For the Italian firms, contributions other than financial do not weigh heavily which could be explained by the fact they do not have flexibility in operating outside their own defined business framework. The strong rejection of the null hypothesis (t=5.22) is a direct consequence of this difference in behavior.

## 3.2 Strategic Motives for FDI

In terms of strategic motives for FDI, there were significant differences between French and Italian enterprises in terms of "Increase in global sales and market share" (t=7.53). This is due to the fact that questioned Italian enterprises (and Italian enterprises in general) are more export-oriented ; they are indeed mostly operating in the off-shore sector.

There were also significant differences between French and Italian MNE's tendency to follow customers in the Tunisian market (t=6.22). Because of the historical and economic ties between France and Tunisia and the large number of Tunisians living and visiting France- and vice versa-, the French enterprises can easily be aware of the potential markets in Tunisia. It is not necessarily the case with Italian firms whose approach is more rational.

Table 3 Strategic Motives

| | French | | Italian | | All | | t-Test Ho : $\mu1-\mu2=0$ |
|---|---|---|---|---|---|---|---|
| | m1 | s1 | m2 | s2 | m | s | |
| 1. Protection of market share of investing company vis-a-vis competitors | 2.71 | 0.72 | 3.89 | 0.75 | 3.37 | 0.94 | −4.45 |
| 2. Increase in global sales and market share | 3.85 | 0.36 | 2.72 | 0.46 | 3.21 | 0.70 | 7.53 |
| 3. Decreasing risk through geographic diversification | 2.42 | 0.85 | 2.44 | 0.51 | 2.43 | 0.66 | −0.08 |
| 4. To acquire key resources/assets | 2.28 | 1.11 | 1.38 | 0.50 | 1.77 | 0.83 | 3.07 |
| 5. Gains from economies of scale and scope | 2.5 | 0.94 | 2.66 | 0.48 | 2.59 | 0.71 | −0.62 |
| 6. Following customers into Tunisia | 2.64 | 0.84 | 1.22 | 0.42 | 1.84 | 0.82 | 6.22 |
| 7. Overcoming tariff or non-tariff barriers imposed by host countries | 2.85 | 1.05 | 2.55 | 0.37 | 2.68 | 0.79 | 1.12 |
| 8. To provide supplies of raw materials | 1.92 | 0.91 | 1.27 | 0.46 | 1.55 | 0.76 | 2.62 |

Another difference between Italian and French enterprises is the degree of market share protection (t= −4.45). By market share protection, we are referring to the fact that in some industries, Tunisia is still using some forms of regulations that helps the foreign investors in keeping their competition in this industry. Besides, this competition is already below the levels of home countries. Italian firms strongly value this protection (3.89), and so do the French firms but at a lower level (2.71). Italian firms require higher level of protectionism to minimize their risk.

For the rest of the strategic motives we have chosen, we did not obtain any significant differences between Italian and French firms. However, for these motives, they were all either above or below the 2.5 point. Both, Italian and French MNEs put little weight to the following motives when elaborating their strategies : "Decreasing risk through geographical diversification", "To acquire key resources/assets", and "To provide supplies of raw materials". However, they give more importance to motives such as "Gains from economies of scale and scope" and "Overcoming tariff and non-tariff barriers imposed by host countries".

## 4. Determinants of FDI in Tunisia

We are using the eclectic paradigm of Dunning as a basic framework to this study which seeks to shed light on Italian and French MNE activities in Tunisia. The eclectic paradigm seeks to provide a systematic framework for explaining why MNEs, with headquarters in Italy and France, have some form of involvement in Tunisia ; what competitive advantages that possess over Tunisian firms and how do they find it economic to internalize the markets of these assets with complementary factor endowments in the Tunisian location.

### 4.1 Ownership Specific Advantages

Applying the eclectic paradigm, our study identified several ownership factors, which seek to capture the main competitive advantages of French and Italian enterprises in seeking to serve customers in Tunisia.

Table 4　Firm Competitive Advantages in Tunisia

| | French | | Italian | | All | | t-Test Ho : $\mu 1-\mu 2=0$ |
|---|---|---|---|---|---|---|---|
| | m1 | s1 | m2 | s2 | m | s | |
| 1. Size and scope of firm | 3.85 | 0.53 | 3.61 | 0.70 | 3.71 | 0.63 | 1.06 |
| 2. International experience | 4.07 | 0.47 | 4.11 | 0.76 | 4.09 | 0.68 | −0.17 |
| 3. Trade marks & brand image | 3.92 | 0.45 | 4.05 | 0.87 | 3.99 | 0.71 | −0.50 |
| 4. Investment in training | 4.07 | 0.73 | 3.72 | 0.67 | 3.87 | 0.75 | 1.20 |
| 5. Technological advantages (e. g. unique product or process) | 4.21 | 0.61 | 3.94 | 0.80 | 4.05 | 0.67 | 1.04 |
| 6. Knowledge of local tastes and requirements of business in Tunisia | 3.42 | 0.59 | 2.11 | 0.59 | 2.68 | 0.95 | 6.15 |
| 7. Economies of scale in production or marketing | 2.42 | 0.94 | 3.11 | 0.94 | 2.8 | 0.97 | −2.06 |
| 8. Organizational capabilities | 4.14 | 0.85 | 3.83 | 0.79 | 3.96 | 0.82 | 1.07 |
| 9. Entrepreneurial culture | 3.5 | 0.65 | 3.66 | 0.77 | 3.59 | 0.71 | −0.64 |

In terms of ownership specific advantages, there were significant differences between Italian and French knowledge of local tastes and requirements of business in Tunisia. This result was somehow predictable since Tunisia was a French colony and hence French enterprises have higher in-depth knowledge of the Tunisian market. For the other ownership specific advantages, there were no significant differences between the two groups of firms. However, we could still look at what are the most important ownership advantages for those companies. For the Italian firms "International experience" ranked number one (4.11), followed by "Trade marks & brand image" (4.05) and "Technological advantages" (3.94), and the last being "Knowledge of local tastes and requirements of business in Tunisia" (2.72). For the French companies, we have a slightly different picture. They ranked "Technological advantages" first (4.21) ; the second highest ranked Ownership advantage listed by the French firms is "Organizational capabilities" (4.14), and the third are "Investment in training" and "International experience" (4.07).

## 4.2　Location Specific Advantages

The location specific advantages hypothesized by the eclectic paradigm are those which reflect the attractions offered by Tunisia as a site for MNE activity.

Table 5 Tunisian Locational Advantages

| | French | | Italian | | All | | t-Test<br>Ho : $\mu1-\mu2=0$ |
|---|---|---|---|---|---|---|---|
| | m1 | s1 | m2 | s2 | m | s | |
| 1. Relatively low taxation | 3.85 | 0.66 | 4.55 | 0.51 | 4.24 | 0.67 | −3.47 |
| 2. Other government incentives for foreign investment | 3.92 | 0.62 | 3.72 | 0.75 | 3.8 | 0.69 | 0.83 |
| 3. General social, political and economic stability in Tunisia | 4.14 | 0.36 | 3.83 | 0.62 | 3.96 | 0.53 | 1.72 |
| 4. Geographical position of Tunisia | 3.64 | 0.75 | 4.38 | 0.50 | 4.05 | 0.71 | −3.36 |
| 5. Low cost of labor | 4.35 | 0.49 | 4.44 | 0.85 | 4.40 | 0.71 | −0.35 |
| 6. Low real cost of labor (i.e. wages after productivity has been allowed) | 4.07 | 0.61 | 3.88 | 0.67 | 3.96 | 0.64 | 0.82 |

Italian firms perceive the geographical position of Tunisia and low taxation as determinants for the FDI activities more than do French firms (respectively $t=-3.36$ and $t=-3.47$). On one hand, this can be related to the fact that Italy is geographically closer to Tunisia, which generates lower transportation costs. As for taxation, on the other hand, the result may reflect the high corporate taxation in Italy (Among the highest in the world).

For all the mentioned determinants in the questionnaire, both groups scored highly, at the right side of the scale (2.5 to 5). Looking at the way these determinants ranked by each group of firms, we have two different profiles. For the Italian corporations, the ranking was as follows : First "Low taxation", second "Low cost of labor" and third "Geographical position of Tunisia". For the French corporations the ranking was as follows : First "Low cost of labor", second "General social, political and economic stability in Tunisia" and the third "Low real cost of labor".

## 4.3 Internalization Specific Advantages

The final set of advantages, the internalization advantages, addresses the issue of the form or modality of overseas involvement. We did not test empirically any specific variable, but it is rather interesting to note that the majority of intelligible answers came from Italian enterprises. The strongest arguments were made for the 100% ownership to better control their products, to have a development plan along the parent company criteria and to avoid frictions and misunderstandings with Tunisian partners related to the "different mentalities". Some firms have clearly stated that they prefer to avoid joint ventures with local partners because they feel the absence of a well-defined and fair legal framework to protect their own interests.

### 4.4 The Future of FDI in Tunisia : Obstacles and Challenges

From the comments made by the persons in charge of the surveyed enterprises, we have also looked at some obstacles and challenges that were raised in answering certain questions.

#### 4.4.1 *Obstacles*

We can say that the two groups are echoing each other in their perceptions of the obstacles to future FDI in Tunisia. The main obstacles are the slowness of the administration to grant permits and negotiate major issues and the lack of clear, fair and respected "rules of the game" especially regarding legal procedures. Other issues such as the lack of infrastructure and the employees' misconduct of the company's affairs have also been mentioned.

#### 4.4.2 *Challenges*

The challenges are clear. There is a need to lower or totally remove these obstacles. As it was stated by an owner of an Italian enterprise : "immediate action instead of lip service" is needed to improve the general investment climate. A modernized government system is required to implement the reforms needed to liberalize the economy (privatization, creation of capital markets, modernized regulations...). The challenge is also to make effectively all these changes and be able to attract new investments in sectors of possible interest and in which FDI remains still very low.

## 5. Conclusion : Main Findings

The degree of importance of the variables tested in the study corresponds in many cases to the major findings in the literature of International Business and foreign direct investment notably in the developing countries. For instance, in terms of locational advantages, the enterprises regardless of their origin and characteristics gave a lot of weight to cost minimizing factors either related to labor ( "Low cost of labor" (4.40)) or to transport (Geographical position (4.05)). ** In terms of ownership specific advantages that Italian and French firms possess over Tunisian firms, "International experience" and "Technological advantages" appeared to be the main strength of the surveyed firms.

Yet, we found many statistical differences between the behavior of Italian and French enterprises. These differences are related also to different contextual variables such as the sector and the type of investment, the size of the firm and its degree of multinationality, but the nationality of the firm remains influential. For example, it is clear that France has a higher level of understanding of the Tunisian market. Also, the geographical position and the perception of the degree of market protection and taxation advantages are different for each country, and these variables generate the business behavioral differences between the two groups of firms. We hope to detect more thoroughly in future studies the characteristics of the management philosophy of French and Italian enterprises.

## References


Casson, M. C. (1987). The Firm and the Market, MIT Press, Cambridge, Massachusetts.

Caves, R. E. (1982). Multinational Enterprise and Economic Analysis, The Cambridge University Press, Cambridge, U. K.

Dunning, J. H. (1980). Explaining Changing Patterns of International Production : In Defense of the Eclectic Theory", Oxford Bulletin of Economics and Statistics, 41.

Dunning, J. H. (1988). Explaining International Production, Unwin Hyman, London.

Dunning, J. H. (1993). Multinational Enterprises and the Global Economy, Addison-Wesley Publishing.

Radulescu, M. (1996). Towards a Strategy for Increasing FDI Impact on the Romanian Economy, Centre for Economic Reform and Transformation (CERT), Discussion Papers, 96/17, Heriot-Watt University, Edinburgh.

Schneider F. and Frey B. S. (1985). Economic and political determinants of foreign direct investment. World Development, 13 (2), February.

Singh, H. And Kwang, W. J. (1995). Some New Evidence on Determinants of FDI in Developing Countries, World Bank, Working Papers, 1531.


(received May 31, 2002)

** Although the empirical evidence is mixed, most studies confirm the influence of wage and transport costs in attracting FDI to developing countries. For example, in a wide ranging cross-country study of 54 developing countries, Schneider and Frey (1985) found wage costs to have a significant influence on the geographical distribution of MNE activity. Similarly, low transport costs have a higher stimulatory effect on FDI in developing countries, since investing firms have a tendency to preserve the cost savings gained through relative wage costs (Dunning, 1993).